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FEDERAL COMMUNICATIONS COMMISSION
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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Preparation for International	)	IC Docket No. 94-31
Telecommunication Union World	)	
Radiocommunication Conferences	)	

To: The Commission

ALCATEL NETWORK SYSTEMS, INC.
COMMENTS IN SUPPORT OF
ASSOCIATION OF AMERICAN RAILROADS
PETITION FOR PARTIAL CLARIFICATION AND RECONSIDERATION

The Commission has recommended that the 1995 World Radiocommunication Conference ("WRC-95") reallocate the upper 6 GHz (6.650-7.075 GHz) band for Non-Geostationary Mobile-Satellite Service ("NGSO MSS") feeder links.[1] If this proposal is adopted at WRC-95, terrestrial fixed point-to-point microwave service ("FS") users, which are allocated that band on a primary basis, would be required to share it with NGSO MSS feeder links on a co-primary basis.

This reallocation of the upper 6 GHz band would be a disaster for FS users. As FS users and equipment manufacturers, such as Alcatel Network Systems, Inc. ("ANS"),[2] have demonstrated repeatedly, this proposed reallocation would usurp necessary spectrum needed to support PCS and

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[1]Preparation for International Telecommunication Union World Radiocommunication Conferences, Report, IC Docket No. 94-31 (FCC 95-256, released June 15, 1995) at para. 49. See also United States Proposals for the 1995 World Radiocommunication Conference, Proposals for Agenda Items 2.1c and 3d, Allocations for Feeder Links for the Mobile-Satellite Services, Document No. 010-E (July 11, 1995).

[2]ANS is a wholly-owned subsidiary of Alcatel Alsthom ("Alcatel"), one of the world's largest corporations (with annual sales in excess of $30 billion) and the world's largest manufacturer and supplier of telecommunications equipment. In particular, Alcatel is the world's largest independent manufacturer and supplier of microwave radios. Formerly Collins Radio and Rockwell International, ANS, with over $750 million in annual sales, is a world leader in manufacturing microwave and light wave transmission systems. ANS' equipment is used for a wide range of services, including short, medium and long-haul voice, video and data transmission. Its microwave customers include all the Bell Operating Companies, most major independent telephone companies, cellular operators, power and other utility companies, oil companies, railroads, industrial companies, and state and local government agencies.

other essential telecommunications services.[3] The upper 6 GHz band already is quite congested and its availability for FS users relocating off the 2 GHz band to clear PCS spectrum and for PCS licensees which will need FS networks to support their operations will be diminished significantly by interference from NGSO MSS feeder links.

Driven by this potential threat to FS and PCS networks, on July 17, 1995, AAR filed a Petition for Partial Clarification and Reconsideration ("Petition") of the Report.[4] In its Petition, AAR requests that:

> the Commission reconsider its proposal to allocate spectrum at 6 GHz for MSS feeder links. Should the 6 GHz band be designated internationally for NGSO [MSS] feeder link use, AAR urges the Commission to clarify and strengthen its commitment to protect the fixed microwave licensees' rights to occupy the 6 GHz band.[5]

In comments filed contemporaneously herewith, TIA supports grant of the Petition because it would eliminate or mitigate the catastrophic impact that the recommended reallocation of the upper 6 GHz band for NGSO MSS feeder links would have on the FS and PCS industries. ANS agrees completely with TIA.

Commencing with its decision to evacuate FS users off the 2 GHz band for PCS, the Commission has ignored their needs and the vital role they play in maintaining the nation's telecommunications infrastructure as it evolves into a wireless platform.[6] Essential

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[3]See, e.g., May 15, 1995, Late Further Reply Comments On Second Notice of Inquiry; April 28, 1995, Statement of Non-Concurrence in Final Report of IWG-4. The FS interests represented in these two (2) filings are ANS, American Petroleum Institute, Associated Public-Safety Communications Officials International, Association of American Railroads ("AAR"), AT&T Corp., Harris Corporation-Farinon Division, the Fixed Point-to-Point Communications Section, Network Equipment Division of the Telecommunications Industry Association ("TIA"), and UTC.

[4]Public Notice of the Petition was issued July 21, 1995. 60 FR 38339 (July 26, 1995).

[5]Petition at 1.

[6]To accommodate PCS, FS users have been required to clear the 2 GHz band and to relocate in bands above 3 GHz. Redevelopment of Spectrum to Encourage Innovation In the Use of New Telecommunications Technologies, Second Report and Order, ET Docket No. 92-9, 8 FCC Rcd 6495,

telecommunications services are provided by FS users. Public health and safety users depend on reliable and available FS frequencies for delivery of their services to the public. Local exchange carriers, cellular telephone companies, utilities, railroads, petroleum companies, financial institutions, and federal, state and local governments use FS to support their network operations. Emerging wireless telecommunications, especially PCS, will rely on FS users for spectrum to provide their services and will rely on FS facilities in other bands to support their operations. Provision of these critical services requires very high path reliability (e.g., 99.999% or higher). Indeed, in its Petition, AAR details how FS networks contribute to serving the public interest:

> The railroads rely on [FS] communications systems operating in the 2 and 6 GHz bands to support critical safety functions for more than 1.2 million freight cars on more than 215,000 miles of track. These systems not only remotely control the switching of tracks necessary for safe routing of trains through busy depots and freight yards, but also relay critical telemetry data from trackside defect detectors located throughout the rail network. Any degradation in the quality of, or interference to, the railroads' communications networks could endanger both life and property.[7]

6519-20 (1993), modified, Memorandum Opinion and Order, 9 FCC Rcd 1943 (1994). However, the bands designated for the relocating 2 GHz FS users, primarily the 6 and 11 GHz bands, already are very congested. Unfortunately, needed relief from this spectrum congestion is not provided in other recent Commission allocation decisions. Newly available spectrum in the 4 GHz band from the federal government will not be allocated so that this band is feasible as a substitute for the FS users being migrated off the 2 GHz band. Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, First Report and Order and Second Notice of Proposed Rule Making, 77 Rad. Reg. (P&F) 2d 314 (1995) and Second Report and Order (FCC 95-319, released Aug. 2, 1995). A currently pending proposal to channelize the 27.5-29.5 GHz band for the co-primary FS users is unlikely to be adopted. See Joint Petition for Rulemaking, filed February 9, 1995, by Harris and Digital Microwave Corporation to re-channelize the 28 GHz band for FS users. Indeed, the Commission recently proposed reallocating the 28 GHz band only for Local Multipoint Distribution Service systems, Fixed Satellite Service and MSS system feeder links. See FCC Proposes Band Plan For LMDS, FSS and MSS, News Release, Report No. DC 95-100 (Mimeo No. 54826, released July 13, 1995). The 38 GHz band, which is allocated for FS, already is saturated with PCS applicants needing backhaul support. Proposals are pending to reallocate the 37 GHz band and the bands above 40 GHz for FS, but there is great uncertainty whether such allocations ever will be made. Amendments of Parts 21 and 94 of the Commission's Rules to Establish a Channel Plan and Technical Rules for the 37.0-38.6 GHz Band, RM-8553, filed September 9, 1994, by TIA; Amendment of Parts 2 and 15 of the Commission's Rules to Permit Use of Radio Frequencies Above 40 GHz for New Radio Applications, Notice of Proposed Rule Making, 9 FCC Rcd 7078 (1994).

[7]Petition at 2.

Unfortunately, as the result of the Commission's unjustified recommendation to reallocate the upper 6 GHz band for NGSO MSS feeder links at WRC-95, it is highly questionable if adequate spectrum will be available to FS users to meet these demands. Overcrowding in the upper 6 GHz band could become worse.[8] Up to a 30% decrease in available spectrum in the upper 6 GHz band, and severe path degradation, could plague FS users if they are made co-primary with NGSO MSS feeder links.

Inexplicably, the Commission has ignored this problem. Despite widespread industry opposition, the Commission attempts to justify its recommendation that FS users share these bands with NGSO MSS feeder links, by promising that it will "give priority in the 6 GHz and 11 GHz bands to relocated 2 GHz microwave licensees during a reasonable period of time."[9] This commitment is hollow. Once NGSO MSS feeder links invade the upper 6 GHz band and preempt a significant amount of the already decreasing spectrum for FS users, this priority treatment will be ineffective because there will be inadequate capacity available.

AAR agrees, in the Petition, that the Commission's commitment, to give FS users "priority" in the upper 6 GHz band, is meaningless. AAR correctly points out that it is unclear how the contemplated priority for displaced FS users will be established and what will happen to these FS users once their "priority" status is rescinded.[10] Moreover, AAR demonstrates that giving such priority could create unnecessary conflicts among FS users or between FS and MSS users.[11]

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[8]In the Report at para. 49, the Commission also recommends reallocation of the 11 GHz and 18 GHz bands for NGSO MSS feeder links. Given the existing spectrum shortage in the 11 GHz band and the decreasing availability of spectrum in the 18 GHz band, this aggregate reallocation for NGSO MSS feeder links would reduce significantly the relocation options for displaced 2 GHz FS users and the system options for new FS and PCS licensees.

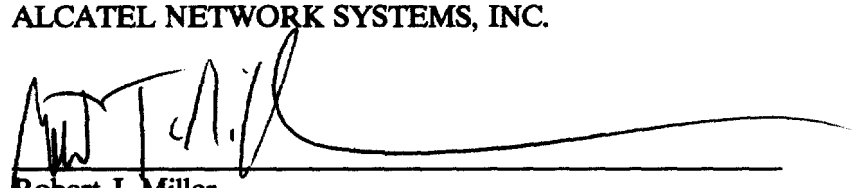
[9]Report at para. 53.

[10]Petition at 4-5.

[11]Petition at 4.

Allowing NGSO MSS feeder links into the upper 6 GHz band, as well as into the 11 and 18 GHz bands, on an unrestricted basis, unquestionably will be unacceptable for FS and PCS networks. Adequate safeguards against NGSO MSS feeder link interference to FS users must be established. Otherwise, the Commission's efforts to ensure a seamless and expedited transition to wireless services could fail. Thus, ANS strongly supports grant of AAR's Petition.

ALCATEL NETWORK SYSTEMS, INC.



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August 9, 1995

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Alcatel Network Systems, Inc. Comments in Support of Association of American Railroads Petition for Partial Clarification and Reconsideration was sent via first class mail, postage prepaid, on the 9th day of August, 1995, to:

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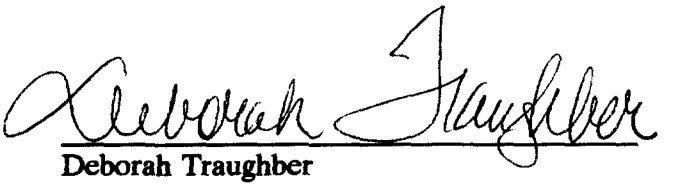

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